

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A slim-type optical pick-up actuator comprising:
 - a lens holder having an object lens for condensing a light on an optical disc, mounted at one side thereof, wherein the lens holder is configured to move in focusing and tracking directions;
 - a base having a plurality of first support members, each having a magnet attached thereto, wherein the magnets face each other and each magnet extends in the tracking direction from a first end of the corresponding magnet through a central portion to a second end of the corresponding magnet; and
 - a driving member having a focusing coil and at least one first and second tracking coil-coils directly attached to the focusing coil in series in the tracking direction in an order of the first tracking coil, the focusing coil and the second tracking coil, a mass center position of the lens holder being substantially coincident with a force center position of the driving member; wherein the focusing coil is installed to face the central portion of each of the magnets, the first tracking coil is installed to face the first end of each of the magnets and the second tracking coil is installed to face the second end of each of the magnets;
 - wherein the lens holder comprises a second support member extending therefrom configured to support the driving member between the magnets, and

Reply to Office Action dated January 25, 2007

wherein the driving member activates the lens holder by an electromagnetic force with the magnets in focusing and tracking directions.

2. (Original) The slim-type optical pick-up actuator of claim 1, wherein the second support member is integrally formed with the lens holder.

3. (Canceled)

4. (Currently Amended) The slim-type optical pick-up actuator of claim 1, wherein the second support member has a focusing coil support boss formed at a position facing ~~with a~~ the central portion of the ~~magnet~~ magnets to dispose a horizontally wound focusing coil, and the lens holder has a coil seat groove formed at both sides of the focusing coil support boss to dispose a vertically wound tracking coil.

5-6. (Canceled)

7. (Currently Amended) The slim-type optical pick-up actuator of claim 1, wherein the second support member has ~~at least one a~~ coil support boss facing ~~with~~ the central portion of ~~each of the magnet~~ ~~magnets~~ to support ~~one of a~~ wound focusing coil ~~and tracking coil~~, and has a coil seat portion formed at sides of the coil support boss to support ~~one of the other~~ ~~wound coil tracking coils~~, and wherein each of the magnets has a single polarity.

Reply to Office Action dated January 25, 2007

8. (Original) The slim-type optical pick-up actuator of claim 7, wherein the coil support boss supports a horizontally wound focusing coil and the coil seat portion is a groove to support a vertically wound tracking coil.

9. (Canceled)

10. (Currently Amended) The slim-type optical pick-up actuator of claim 1, wherein the focusing coil and the first and second tracking coil-coils disposed on the second support member are fixed by epoxy.

11. (Currently Amended) An optical pick-up actuator comprising:

a base that includes a magnetic support unit having a plurality of magnets facing each other;

a lens holder configured to be driven in tracking and focusing directions that includes an object lens mounted at a first side portion thereof and a magnetic driving unit mounted at a second side portion thereof positioned between the magnets,

wherein the lens holder comprises a second support member extending therefrom configured to a support the driving member-magnetic driving unit between the magnets, and wherein a mass center position of the lens holder is substantially coincident with a force center position of the magnetic driving unit, wherein coils of the magnetic driving unit comprise:

Reply to Office Action dated January 25, 2007

a focusing coil configured to face a central portion of the plurality of magnets and being horizontally wound in a rectangular shape; and
first and second tracking coils configured to face left and right ends of each of the magnets and each tracking coil being directly attached to a corresponding lateral surface of the focusing coil.

12-13. (Canceled)

14. (Currently Amended) The actuator of claim 12An optical pick-up actuator comprising:

a base that includes a magnetic support unit having a plurality of magnets facing each other;
a lens holder configured to be driven in tracking and focusing directions that includes an object lens mounted at a first side portion thereof and a magnetic driving unit mounted at a second side portion thereof positioned between the magnets,
wherein the lens holder comprises a second support member extending therefrom configured to support the magnetic driving unit between the magnets, and wherein a mass center position of the lens holder is substantially coincident with a force center position of the magnetic driving unit, wherein the coils of the magnetic driving unit comprises comprise:

a tracking coil vertically wound to have a rectangular type facing with the a central portion of each of the magnets; and

first and second focusing coils facing with the left and right sides-ends of the magnets and each focusing coil being directly attached to a lateral surface of the tracking coil.

15. (Currently Amended) The actuator of claim 11, wherein the each magnet of the magnetic support unit has a single polarity.

16. (Currently Amended) The actuator of claim 11, wherein the force center position of the magnetic driving unit includes a force center position of the focusing coil and a force center position of each of the tracking ~~coil-coils~~ that are each substantially coincident with the mass center position of the lens holder.

17. (Currently Amended) The actuator of claim 11, further comprising a pair of wire suspensions connected at a first end to the lens holder and at a second end to a frame to support the lens holder with a prescribed degree of freedom.

18. (Currently Amended) A slim-type optical pick-up actuator, comprising:
single magnets fixed to face one another having a magnetic field area therebetween;
a lens holder having an object lens mounted at one side thereof for activation, and having tracking and focusing coils symmetrically installed directly connected to each other in series in the-a tracking direction in the magnetic field area of the magnets;

Reply to Office Action dated January 25, 2007

a frame for supporting the lens holder; and

a plurality of wire suspensions for flexibly attaching the frame to the lens holder, wherein the tracking and focusing coils comprise:

a focusing coil positioned at a central portion between the magnets and having a horizontally wound surface facing the magnet; and
left/right-end tracking coils positioned at left/right ends of each of the magnets and each tracking coil having two vertically wound surfaces facing the magnets.

19. (Currently Amended) The slim-type optical pick-up actuator of claim 18, wherein the lens holder comprises:

first and second housing grooves each having one single magnet positioned therein; and

a coil supporter integrally formed with the lens holder and formed in a Y-axis direction such that the ~~focusing and tracking~~ and focusing coils are seated between the first and second housing grooves.

20. (Canceled)

21. (Currently Amended) The slim-type optical pick-up actuator of claim [[20]] 18, ~~wherein the coil supporter has further comprising~~ a focusing coil support boss having the

Reply to Office Action dated January 25, 2007

focusing coil fixed thereto, and has having a tracking coil seat groove at a lower level between the focusing coil support boss and an internal lateral surface of the lens holder.

22. (Currently Amended) The slim type optical pick-up actuator of claim 19, A slim-type optical pick-up actuator, comprising:

single magnets fixed to face one another having a magnetic field area therebetween;

a lens holder having an object lens mounted at one side thereof for activation, and having tracking and focusing coils symmetrically installed and directly connected to each other in series in a tracking direction in the magnetic field area of the magnets;

a frame for supporting the lens holder; and

a plurality of wire suspensions for flexibly attaching the frame to the lens holder, wherein the tracking and focusing coils comprise:

wherein the first and second focusing coil is coils disposed at left and right sides of the a coil supporter to face left and right sides ends of the magnets, and the a tracking coil is disposed vertically on a center of the coil supporter to face the a center of each of the magnets.

23. (Canceled)

Reply to Office Action dated January 25, 2007

24. (Currently Amended) The slim-type optical pick-up actuator of claim 1, wherein a bobbin for fixing the focusing coil or the first and second tracking coil-coils is not needed.

25. (Currently Amended) The actuator of claim 11, wherein a bobbin for fixing the focusing coil or the first and second tracking coil-coils is not needed.

26. (Currently Amended) The slim-type optical pick-up actuator of claim 18, wherein a bobbin for fixing the ~~focusing coil or the tracking coil-and focusing coils~~ is not needed.

27. (Canceled)